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Our ref: LTR-NRC-04-35

May 27, 2004

Subject: Comments on Proposed Draft Generic Communication on Containment Sump Blockage

Attached please find Westinghouse's comments regarding "Proposed Generic Communication Potential Impact of Debris Blockage on Emergency Recirculation during Design Basis Accidents at Pressurized Water Reactors." The proposed generic communication was cited in Federal Register Vol. 69, No. 62, Page 16981, dated March 31, 2004.

Westinghouse appreciates the opportunity to comment on this important issue to the nuclear industry.

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Regulatory Compliance and Plant Licensing

cc: W. Macon

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Attachment

E-RIDS = ADM-03 ale = c. Petrose (ODF)

Template = ADM-013

# Proposed Generic Communication Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized Water Reactors

#### Introduction

On March 24, 2004 NRC issued a Notice of Availability for a draft generic communication for public comment. The proposed draft communication requests that PWR licensees provide information regarding their planned actions and schedule to confirm compliance with 10 CFR 50.46(b)(5), with respect to the susceptibility of PWR recirculation sump screens to debris blockage during design basis accidents.

Westinghouse Electric Company understands and appreciates the importance of ensuring that plant systems meet their design requirements for safety. The following represents comments from Westinghouse on the proposed generic communication, organized by section of the generic letter.

## **Background**

In the course of resolving potential concerns identified in the Generic Letter, NRC suggests that licensees may need to "reevaluate the adequacy of their compensatory measures in light of the new information and take further action as appropriate and necessary" in accordance with Generic Letter 91-18, Revision 1. Westinghouse suggests that this is an inappropriate use of GL 91-18, as the methods that may be used to resolve the concerns in the proposed draft generic communication are not yet approved and, hence are not part of any plant's licensing basis.

#### Discussion

"NRC staff recommends the use of an analysis method that mechanistically accounts for debris generation and transport, post accident equipment and systems operation with debris laden fluid." This "recommendation" will be inferred by licensees as a requirement, which will limit the options licensees are likely to explore to resolve the issue. As such, the statement should be deleted from the proposed draft generic communication

### **Requested Information**

The current schedule for issuing the proposed draft generic communication as a Generic Letter (GL) is August, 2004. Licensees will have 15 days from the issue date to determine whether they will be able to provide the information requested in the GL, and if so, 60 days from the issue date to provide the requested information to NRC.

Given the expected August, 2004 issue of the GL, and anticipated completion of the technical review of the industry guidance in September, 2004, licensees will have to base the evaluation of

their ability to provide the requested information based on an as-yet unapproved methodology for mechanistic evaluation of ECCS and CSS recirculation functions.

Furthermore, the draft generic communication identified that licensees are to address the potential effects of corrosion products on resulting head loss across debris beds that may form on the containment sump screen when the ECCS and CSS operate in the recirculation mode. NRC has acknowledged that there are insufficient data currently available to specifically address this issue. NRC and the PWR Industry have embarked on a test program to develop that data. The test program is scheduled to provide preliminary data during August 2004 and be completed by the end of 2004. In public meetings, NRC has suggested that this issue might be addressed by licensees by including margin in the calculation of head loss. However, NRC has also acknowledged that insufficient data exist to identify how much margin is sufficient.

Finally, licensees will have a very limited time (likely 30 days or less) to evaluate the methodology approved by NRC (assuming approval comes at the time of completion of the technical review), determine the applicability to the methodology to their plant(s), identify internal or external resources needed to support the evaluation, and provide a schedule for its completion.

The proposed draft generic communication identifies that, by April 1, 2005, licensees will be required to provide information confirming their compliance with regulatory requirement, including any plant modifications that may be necessary to bring the plant(s) into compliance. Licensees will likely not have qualified manpower available to perform all of the activities required to complete the mechanistic evaluations, and to design any necessary plant modifications. Some or all of these activities will likely be performed by qualified contractors. Given the amount of qualified resources available to the industry, it is highly unlikely that the entire fleet of 69 PWRs will be able to complete the evaluations needed by April 1, 2005.

The information request includes consideration of the head loss effects from the chemical environment in containment. The joint industry-NRC research effort to test for these effects, and the subsequent related analysis of the test data to determine these effects, will likely not be completed until at least the end of 2004. The expectation of licensees to accommodate these unknown effects seems unreasonable.

In summary, the Westinghouse believes the timeframe required for providing the information identified in the proposed draft generic communication does not adequately take into account the related activities being performed by both the industry and NRC Research to resolve GSI-191, or the review period that would follow the submittal of industry findings. Licensees would be put in the position of submitting license amendment requests based on methods that have not yet been approved at the time of submittal.

Westinghouse proposes that the schedule basis for providing information be revised to be based on the date of acceptance of the results of the corrosion product testing program. The program to develop that information is in place and being performed. As a minimum, the schedule basis for providing information should be revised to the approval date of the industry guidance as opposed to the formal issue date of the proposed draft generic communication as a Generic Letter, with

information that will require knowledge of the results of the chemical effects testing amended to be based on the date of acceptance of the results of the corrosion product testing program.

## Paperwork Reduction Act Statement

NRC estimates the burden to the public for this information request to average 1,000 hours per response. Westinghouse believes this estimate is very low. Given the amount of information required to perform the evaluations, including plant walkdowns, an estimate of 5,000 to 10,000 hours is expected to be closer to the actual effort needed to properly respond to the proposed draft generic communication and the April 1, 2005 information request, as well as related actions, if determined appropriate. The estimate of 5,000 to 10,000 hours does not include the effort needed to perform plant modifications, procedure changes and associated training, or licensing activities.